CLAIMS

1. A fuel cell system comprising:

a fuel generator configured to generate a hydrogen-rich fuel gas by reforming a feed gas;

a material supply means configured to supply the feed gas to said fuel generator;

a fuel cell configured to generate electric power using the fuel gas supplied from said fuel generator and an oxidizing gas;

a bypass means configured to supply the feed gas to an anode of said fuel cell by bypassing said fuel generator;

a material supply switch means configured to switch a destination of the feed gas supplied from said material supply means between said fuel generator and said bypass means;

a material flow rate meter disposed at a position of a feed gas passage to be located between said material supply means and the anode and configured to measure a flow rate of the feed gas flowing through said bypass means; and

a controller,

wherein, at start-up of said fuel cell system, the feed gas is injected to the anode through said bypass means,

and said controller is configured to cause said material supply switch means to operate based on a value output from said material flow rate meter to stop supply of the feed gas to the anode, and to then start the supply of the feed gas to said fuel generator.

2. The fuel cell system according to claim 1, further comprising:

a desulfurization device provided in the feed gas passage and configured to remove a sulfur component from a city gas which is the feed gas.

3. The fuel cell system according to claim 1, further comprising:

a combustor configured to heat said fuel generator by combusting the feed gas supplied to the anode through said bypass means and exhausted from the anode, or the feed gas supplied from said material supply means.

4. The fuel cell system according to claim 1, further comprising:

a material flow rate adjusting means provided upstream of said material supply switch means and configured to adjust a flow rate of the feed gas supplied from said material supply means.

5. The fuel cell system according to claim 1, further comprising:

an air supply means configured to supply air to at least one of the anode and said fuel generator, wherein after said air supply means supplies the air to at least one of the anode and said fuel generator and stops the supply of the air, the feed gas is supplied to the anode through said bypass means.